



THE FIRST MILE TRACEABILITY BAROMETER

Deforestation Monitoring &
EUDR Compliance

Farmforce | 2023



A MESSAGE FROM FARMFORCE

Embracing Collaboration & Building Stronger Supply Chains

Collaboration is the key to unlocking the true potential of our agricultural industry. As part of our sales and marketing team, we are passionate about delivering exceptional solutions and eager to learn from and grow with our partners.

Supply chains are the lifeblood of our business, and we are genuinely fascinated by their intricacies. Every link in the chain presents an opportunity for improvement, efficiency, and innovation. We want to dive deep into the heart of supply chains, understand their complexities, and harness our expertise to drive positive change.

Our team is here to offer our knowledge and experience to help you navigate the ever-evolving landscape of agricultural supply chains. We are dedicated to understanding your unique needs, challenges, and goals so that together, we can design tailor-made solutions that fuel your growth.

What truly excites us is the prospect of collaboration. We see every partnership as a chance to combine our strengths and expertise with yours, creating a powerful synergy that propels us all forward. We want to learn from you, and we also want to share our insights and discoveries, collaborating in an environment of trust, respect, and shared success.

We aim to sell products or services and forge lasting relationships built on trust, transparency, and mutual benefit. We want to be your trusted advisors, working hand in hand to identify opportunities, overcome challenges, and create a more sustainable and prosperous future for all.

So let us embark on this exciting journey together. Let us explore new horizons, challenge the status quo, and create a supply chain ecosystem that thrives on collaboration, innovation, and shared success. We are thrilled to be a part of your journey and look forward to working closely with you.

With enthusiasm and dedication,

The Farmforce Team

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EXECUTIVE SUMMARY

farmforce

This report seeks to provide an insightful analysis of the EUDR's influence on the agricultural industry. We aim to enable stakeholders to:

- Comprehend the Regulatory Landscape
- Make Informed Decisions
- Embrace Sustainable Practices & Regulations

The First Mile Traceability Survey & this accompanying report reveal insightful trends in the agricultural market, particularly below, in four key areas.



Traceability Belongs To Sustainability

Traceability lies within a "Sustainability Umbrella".



Priority #1 Farm Level Traceability

Whereas it's their first sustainability objective, companies struggle to achieve farm-level traceability.



High Risk of Import-Related Deforestation

A need for digital tools that ensure forest-friendly sourcing.



Embracing EUDR Compliance

Industry-wide, there is a lack of readiness for EUDR compliance.

The EUDR will inevitably disrupt agri-business worldwide & across supply chains. Valuable stakeholders can ensure compliance & safeguard profits by investing in advanced traceability solutions.



SURVEY BACKGROUND

PURPOSE

Through Q1 & Q2 of 2023, Farmforce conducted The First Mile Traceability Survey to:



Gauge the level of first-mile traceability in the agri-business.



Explore preparedness & perceived challenges companies face towards EU Deforestation-Free Regulation (EUDR) compliance.



Gain insight into trending agri-business topics.



Allow respondents to assess their positioning against competitors & tap into valuable intel to comply with upcoming regulation.



Optimize first-mile traceability solutions based on respondents' views.

METHODOLOGY

- The survey consisted of 29 questions.
- The survey was widely distributed through our email database.*
- Featured on the Farmforce Twitter & LinkedIn pages.
- Free, Online & processed using Typeform¹⁷.

*Our audience is primarily Europe-based importers & producers.

Overall, 87 respondents completed [The First Mile Traceability Barometer Survey](#).

Contact us for your very own EUDR Compliance Checklist.

- This checklist was made by Farmforce in conjunction with responses.

KEY FINDINGS

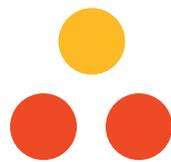


Traceability Belongs To Sustainability

Sustainability programs are crucial in promoting & implementing traceable supply chains. These programs focus on integrating environmentally friendly practices, social responsibility, & economic viability throughout the entire supply chain.



60% of our respondents have a sustainability-related role



Nearly 1 in 3 respondents work in Operations/Innovation & Technology/Purchasing



>85% reported having a "Dedicated Sustainability Team or Program"

These findings suggest traceability lies within a "Sustainability Umbrella." Reinforcing the importance of cross-functional efforts in sustainable sourcing.

Interestingly, several interviewees did not know the main objectives of their sustainability program.

WHY?

- Lack of *Direction* for Sustainability Programs
- Lack of *Confidence* (knowing where to start, when & how)
- Lack of *Visibility* cross-functionally within companies

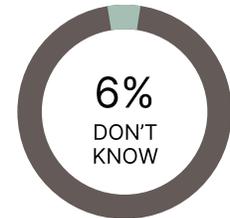
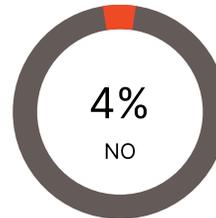
KEY FINDINGS



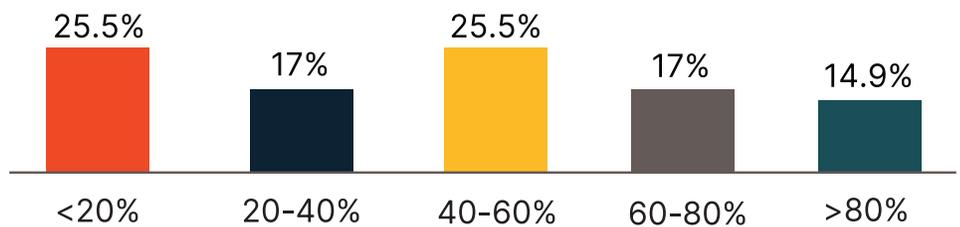
Priority #1 Farm-Level Traceability

Sustainability programs prioritise ethical sourcing, ensuring that the raw materials are obtained responsibly. Traceability enables companies to track the **origin of materials** & **verify compliance with ethical, regulatory, and certifiable standards**.

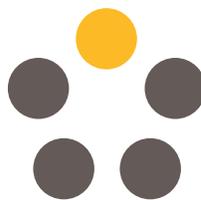
In response to “Has traceability down to the farm level been an objective in your sustainability efforts”, over 90% responded “Yes”.



“What percentage of your sourced crops can you trace to the farm level?”



Suggesting companies are struggling to achieve their traceability goals. We see the connections here to findings I & J (lack of quality mapping).



We performed a 1-week LinkedIn poll to determine the significant pain points leading to **4 in 5 companies lacking traceability**.

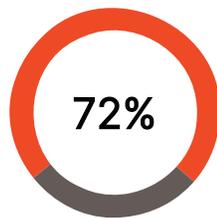
We found ***Lack of Expertise*** & ***Lack of Effective AgTech***, as the top two barriers to full traceability.

High Risk of Import-Related Deforestation



Traceability allows companies to identify areas where environmental improvements can be made & provides insights for implementing sustainable solutions.

In response to "Does your company import deforestation-prone goods into the EU market?"



of our audience are importing deforestation-prone produce into the EU market, or cannot verify their products as "deforestation-free".

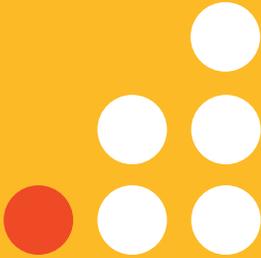
The concern here remains the need for more visibility into the first mile of the supply chain.

Not knowing, validating, or audit-proofing farming & import processes will undoubtedly lead to sanctions & disruptions.



This indicates a need for digital solutions that ensure forest-friendly sourcing.

KEY FINDINGS

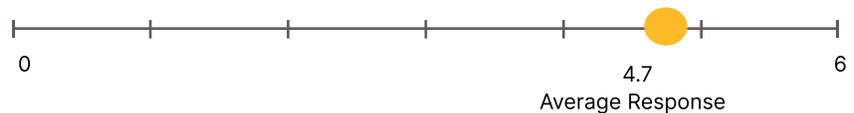


Embracing EUDR Compliance

Non-Compliance leads to *severe consequences* :

- Regulatory authorities have the power to impose fines, suspend/ revoke market authorizations, seize/recall products, even initiate legal action against non-compliant operators.
- These consequences can have a substantial impact on profits, finances, operations, & market reputation.

How would you rate the **IMPACT** of such regulations on your operations?



- In response to “What do you think will be the most difficult (EUDR) regulations to comply with?”, interviewees said:

#1: Field-level Traceability For All Relevant Crops

#2: Quality Assurance

#3: Link Imported Crops With Deforestation Events

- We see a correlation between the responses above & the steps below needed to achieve full traceability below.

Step #1: Track Crops Back to Deforestation-Free Fields. Reflected in this report, most companies are at Step #1*

Step #2: Data & Quality Checks = Assurance. Assurances and Interventions can only happen post-implementation

Step #3: Auditing & Compliance.

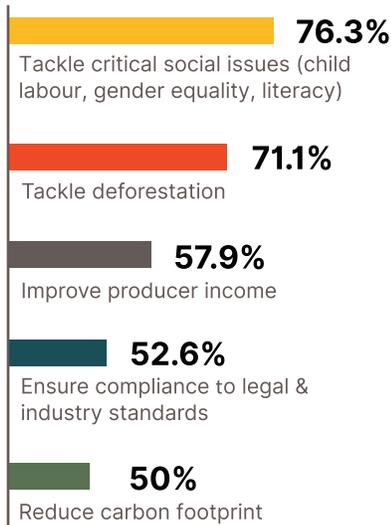
EUDR will enforce quick implementation to farm-level field traceability

*Industry-wide, there is a lack of readiness for EUDR compliance. We see **Answer #1 & Step #1** as the significant pain point in this process.

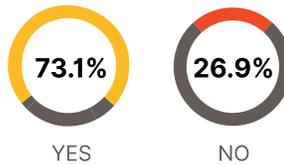
ADDITIONAL RESULTS

While these findings are useful & here for your review, they are not included in what we have deemed Key Findings.

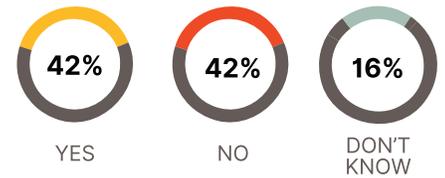
A. What are the main objectives of your sustainability program?



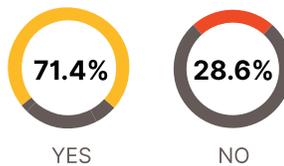
B. Have you heard about the new EU regulation on importing deforestation-free crops?



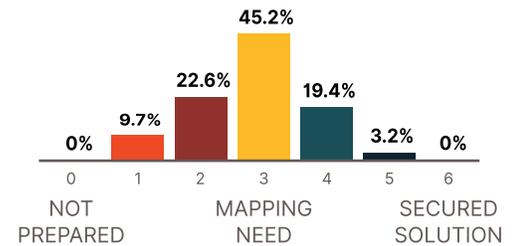
C. Does your company import deforestation-prone goods into the US or UK market?



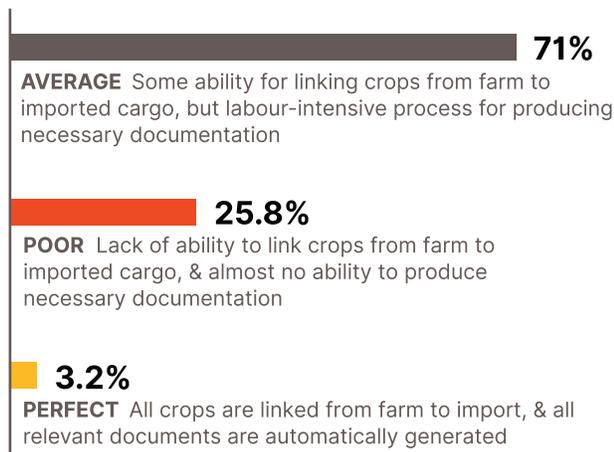
D. Are you aware that deforestation-free regulations will come into place shortly for these markets as well?



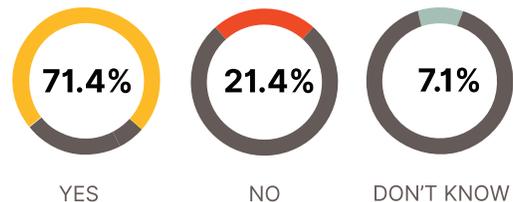
E. How well prepared are you to comply with these regulations?



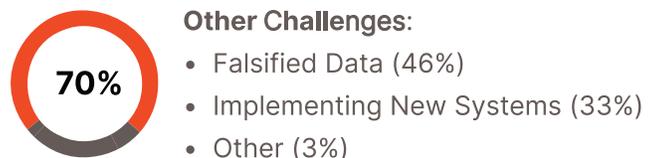
F. How strong is your current ability to document & link crops from farm to shipment being imported into the European Union?



G. Are quality checks in your current process?

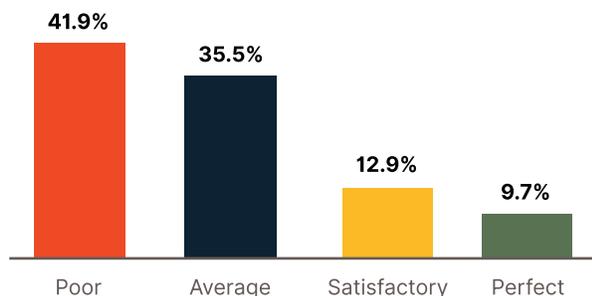


H. In response to "Do you see other challenges in collecting the basic data needed to remain compliant?" 70% of respondents identified "accessing data through suppliers" as a concern.

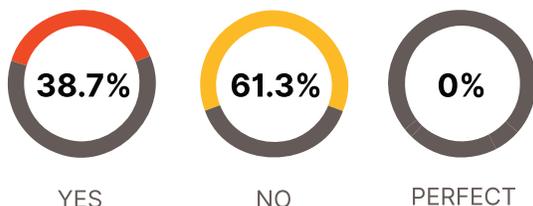


ADDITIONAL RESULTS, CON'T.

I. Only 22% of respondents reported satisfactory results the first time they mapped an area.



J. When asked to rate their ability to “identify mapping errors & performing quality checks in the field, nearly 40% of respondents rated their ability as “poor.”



When mapping errors are identified in the field or via quality checks, remapping activities are needed to correct the data.

- 21% of respondents report having no quality checks in their current processes.
- Another 7% of respondents report they are unsure if they have quality checks in place.

K.



Illegal deforestation² & other activities within the producer level impact all along the supply chain. *Consumers are keenly aware & ready to remain loyal or leave behind brands that do not keep up with traceability.*

According to the CSDDD³, obligations for companies & corporate due diligence is constantly evolving with EU regulations.



No respondents mentioned the EU proposal to ban goods made with forced Labour⁴, but we see this as **the next major impact for agri-business players.**

L.



Apart from the EUDR, some respondents were concerned about the maximum Cadmium levels the EU allowed⁵ in cocoa-derived products. Importers must respect these limits to sell their goods on the European market.

- Cadmium is a carcinogenic heavy metal. Legislation, limiting Cadmium levels (1 Jan 2019), is needed to protect human health.
- While Cadmium is naturally present in the soil, it is also contained in pesticides & chemical fertilizers.
- For this reason, monitoring & minimizing Cadmium content at the farm level is vital.



WHAT IS EUDR?

EUDR is a necessary step towards increased traceability & supply chain resilience.

The European Parliament & The European Council have recently approved EUDR⁶, which aims at **regulating deforestation** at the farm-level & **restricting the sale of any deforestation-related products** within the EU. The regulation scope concerns the following goods:

- Cocoa
- Coffee
- Soy
- Palm Oil
- Wood
- Rubber
- Cattle

The regulation will mandate crop importers to perform anti-deforestation due diligence.

Due diligence entails:



Mapping fields & verifying that sourced crops are deforestation-free*



Ensure data is available for auditing on any imported produce or goods



Store such records for at least five years after importing

*According to the EUDR, a crop is deemed to be deforestation-free only when harvested on a land which was not subject to deforestation or forest degradation after 31 December 2020.



EUDR COMPLIANCE

EUDR aims to mitigate adverse environmental & social impacts. Including, habitat destruction, biodiversity loss, & human rights violations.

An EUDR compliant traceability solution **MUST** allow you to:



Create a GPS-aided digital polygon across all farm-level fields



Store data SAFELY for over five years



Run quality checks of mapped polygons to correct for any errors (overlapping polygons, duplicates, etc.)



Track Living Wage & Income



Determine frequency & content of due diligence reports to the concerned authorities



Track each bag of produce down to a previously mapped & verified deforestation-free field

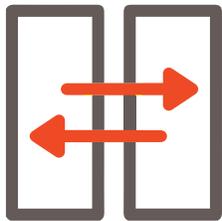


Ensure supply chain transparency for multiple compliance bodies simultaneously



NON-COMPLIANCE RISKS

EUDR non-compliance implies risks for the following stakeholders:



Importers & Exporters

Non-compliance with the EUDR means companies cannot place goods or products on the European market.

Non-compliance can lead to fines of up to **4%** of the annual turnover generated in the EU.

- The likelihood of audited or regulatory checks will be in proportion to the deforestation risk of your crop provenance.
- If you source from high-risk countries, you could have at least a 1-in-10 chance of being controlled with authorities checking at least 9% of your imported volume.
- Examples of high-risk origins might be Cote d'Ivoire (cocoa), Honduras (coffee), Indonesia⁷ (palm oil), & Brazil (soy).

[Such risks apply to those exporting crops from the EU to non-EU countries.](#)

Fairtrade Africa has kindly created the [Fairtrade Risk Map](#), allowing users to assess the deforestation risk of their production areas.



Certification & Verification Bodies

Such as the Roundtable on Sustainable Palm Oil (RSPO) or Forest Stewardship Council (FSC) must ensure their certification schemes align with regulation if they want businesses to use certification as a pathway for risk mitigation.



Smallholder Farmers

In regions where EUDR-related crops are grown may be at a risk of supply chain exclusion if they are unable to meet the requirements for deforestation.

As reported by the Institute for European Environmental Policy (IEEP)⁸, smallholders will need financial & technological support to overcome barriers. In accordance with the Leaving No One Behind (LNOB) Principle⁹, the IEEP outlines a series of recommendations to make EUDR more smallholder-inclusive:



IMPROVED ACCESS TO
FINANCIAL SERVICES



IMPROVED ACCESS TO
AGRICULTURAL INPUTS



TRAINING IN GEOLOCATION
& DIGITAL TRACEABILITY
TECHNOLOGIES

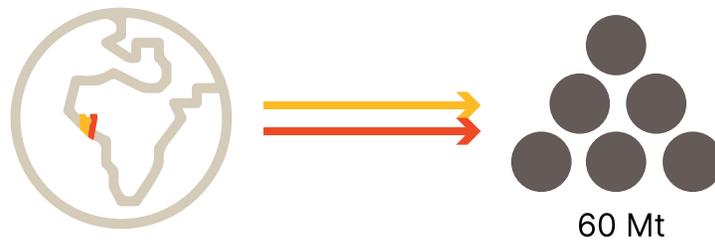
Failing to implement active measures will likely lead to crops' illegal trade⁹ or diversion to non-EU markets.

These issues cascade on companies importing crops in Europe

BENEFITS OF IMPLEMENTATION

While reducing financial risks, forest-friendly tech mitigates climate change.

Assuming quality digitalization implementation, AgTech deployed in all cocoa value chains in Cote d'Ivoire & Ghana can avoid deforestation that would prevent the emissions of ~60 MT of CO₂.



That's the same amount of carbon sequestered by nearly 1 billion tree seedlings over 10 years!¹⁰



With compliance processes such as **Digital Payment & Quality Check functionalities**, farmers can build their credit history.

Doing so increases their chances of accessing financial opportunities e.g., loans from banks & coops, premium payments from traders, zero-deforestation bonuses, etc.

This boosts **Supply Chain Resiliency** even beyond EUDR.

We see **Human Rights & Environmental Due Diligence (HREDD)** as a significant industry shift¹¹ & **EUDR** as only the initial legal action towards agri-business & supply chain industries.

TAKE ACTION



The EUDR will inevitably disrupt agri-business worldwide & across supply chains.

Valuable stakeholders can ensure compliance & safeguard profits by investing in advanced traceability solutions.

Investing in advanced traceability solutions can safeguard profits while meeting regulatory requirements.



By Taking Action Today,
Businesses Can:

- Position Themselves as Leaders in Responsible Sourcing
- Enhance Value Chain Visibility
- Contribute to Ecosystem Preservation & Community Well-Being



TRACEABILITY DOWN TO THE FARM-LEVEL

We see farm-level objectives as the main sustainability objectives aligning towards compliance requirements & consumer trends.

Sustainability: Traceability down to the farm allows for appropriate interventions & mitigations.

Compliance: Traceability down to the farm allows EUDR compliance (and more).



According to the International Cocoa Initiative (ICI), in Ghana & Côte d'Ivoire, 1.56 million¹³ children are engaged in cocoa farming.

- Ensuring appropriate on-the-ground surveys, companies can record crucial information such as age & school attendance frequency.
- Accordingly, they will be able to know whether a minor skips school & implement Child Labour Monitoring & Remediation Systems (CLMRS).

Our findings show a ready demand for improved traceability systems, technologies, & collaboration to collect first-mile data & enhance visibility industry-wide, even beyond EUDR¹⁴.

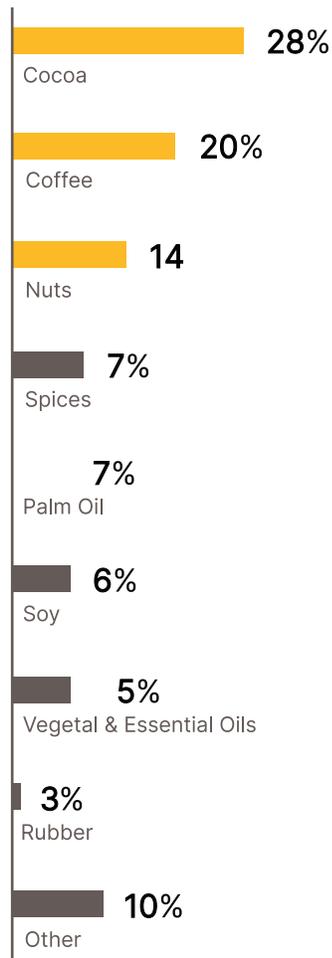
We see these farm-level objectives at least partially driven by the increasing trends toward consumers who want more background information on their product journey. For example, in a recent survey of 2,000 UK shoppers, two-thirds of them significantly value HOW & WHERE a product is made before making a purchase^{12 13 14}.

OTHER RESULTS



Crop

Which of the following crops are you buying?



Cocoa, coffee, & nuts emerge as the top purchased crops, strengthening the importance of their sustainable sourcing.



Supplier Type

Who are your main suppliers?



Region of Origin

Where are you sourcing?



Mapping Without Internet Connectivity

Do you have the ability to map areas without internet connectivity?



OTHER RESULTS

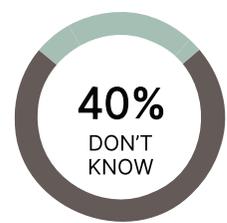
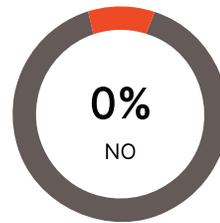


System Support for Field Mapping Activities

Do you use a forest monitoring system to support validation checks today?



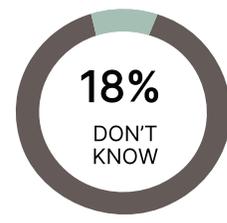
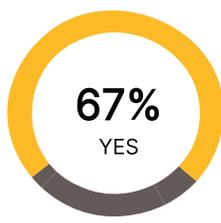
If no, do you plan to implement such a system in the near future?



Do you have a system for storing such data?



If no, do you plan to implement such a system in the near future?



SOURCES

- ¹ "Why illegal deforestation should be treated as a security issue." <https://climate-diplomacy.org/magazine/environment/why-illegal-deforestation-should-be-treated-security-issue>. Accessed 24 May. 2023.
- ² "Child Labour in Cocoa | ICI Cocoa Initiative." <https://www.cocoainitiative.org/issues/child-labour-cocoa>. Accessed 24 May. 2023.
- ³ https://commission.europa.eu/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence_en
- ⁴ "New EU anti-deforestation regulation could make a significant impact, but ignores taxes and human rights," 10 January. 2022. <https://preferredbynature.org/newsroom/new-eu-anti-deforestation-regulation-could-make-significant-impact-ignores-taxes-and-human>. Accessed 24 May. 2023.
- ⁵ "CADMIUM IN CHOCOLATE - European Union." https://food.ec.europa.eu/system/files/2019-03/cs_contaminants_catalogue_cadmium_chocolate_en.pdf. Accessed 25 May. 2023.
- ⁶ "Parliament adopts new law to fight global deforestation | News." 19 Apr. 2023, <https://www.europarl.europa.eu/news/en/press-room/20230414IPR80129/parliament-adopts-new-law-to-fight-global-deforestation>. Accessed 5 May. 2023.
- ⁷ "Indonesia reaches highest deforestation rate in the world - PBS." 6 Jul. 2014, <https://www.pbs.org/newshour/science/indonesia-reaches-highest-deforestation-rate-worldwide>. Accessed 5 May. 2023.
- ⁸ Grabs, J., Cammelli, F., Levy, S. A., & Garrett, R. D. (2021). Designing effective and equitable zero-deforestation supply chain policies. *Global Environmental Change*, 70, 102357. <https://doi.org/10.1016/j.gloenvcha.2021.102357>
- ⁹ "Securing the position of smallholders in zero-deforestation supply" 14 Oct. 2022, <https://ieep.eu/publications/securing-the-position-of-smallholders-in-zero-deforestation-supply-chains/>. Accessed 5 May. 2023.
- ¹⁰ "Policy Trends in Environmental Due Diligence." <https://mneguidelines.oecd.org/policy-trends-in-environmental-due-diligence.pdf>. Accessed 20 May. 2023.
- ¹¹ "Procurement As A Lever for Sustainable Change." <https://en.expensereduction.com/insights/procurement-as-a-lever-for-sustainable-change/>. Accessed 28 May. 2023.
- ¹² "Ivorian NGO identifies issues related to implementing the EU" <https://www.fern.org/id/publications-insight/ivorian-ngo-identifies-issues-related-to-implementing-the-eu-deforestation-regulation-in-the-cocoa-sector-2639/>. Accessed 5 May. 2023.
- ¹³ "New research from Digimarc points to consumer demand for digital" 9 Jun. 2022, <https://packagingeurope.com/news/new-research-from-digimarc-points-to-consumer-demand-for-digital-traceability-solutions/8323.article>. Accessed 24 May. 2023.
- ¹⁴ "Cocoa trade, climate change, and deforestation | resourcetrade.earth." 30 Oct. 2017, <https://resourcetrade.earth/publications/cocoa-trade-climate-change-and-deforestation>. Accessed 5 May. 2023.
- ¹⁵ "The 2022 Norwegian Transparency Act." <https://cepi.net/wp-content/uploads/2022/06/2022-Norwegian-Transparency-Act.pdf>. Accessed 24 May. 2023.
- ¹⁶ "TACKLING (ILLEGAL) DEFORESTATION IN COFFEE SUPPLY" 30 Jan. 2021, <https://www.forest-trends.org/wp-content/uploads/2021/02/10-things-to-know-about-coffee-production.pdf>. Accessed 5 May. 2023.
- ¹⁷ "Typeform: People-Friendly Forms and Surveys." <https://www.typeform.com/>. Accessed 17 May. 2023.

NOTES



NOTES



CONTACT US

WANT TO KNOW MORE ABOUT FARMFORCE & OUR SOLUTIONS?

Reach out to us today!



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